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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/998,137	12/03/2001	Thierry Gandelheid	032880-056	4571

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EXAMINER

THERKORN, ERNEST G

ART UNIT	PAPER NUMBER
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1723

DATE MAILED: 03/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/998,137

Applicant(s)

GANDELHEID

Examiner

TH ERKORN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Feb 25 and Feb 14, 2003.
- 2a) ☐ This action is FINAL.
- 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above, claim(s) 30-34 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 and 35-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4,6, 410
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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Claims 1-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. "predicting a retention time of the compound of interest from a preparative scale HPLC column" renders the claim indefinite.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 1-29 and 35-38 are rejected under 35 U.S.C. 102(A and/or E) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Collins (WO 01/90739). The claims are considered to read on Collins (WO 01/90739). However, if a difference exists between the claims and Collins (WO 01/90739), it would reside in optimizing the steps of Collins (WO 01/90739). It would have been obvious to optimize the steps of Collins (WO 01/90739) to enhance separation.

Claims 2, 3, 9, 10, 11, 14, 23, 24, 28, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Collins (WO 01/90739) in view of Kibbey (U.S. Patent No. 5,670,054). At best, the claims differ from Collins (WO 01/90739) in the clarity of disclosing a UV detector and that a mass spectrometer identifies mass. Collins (WO 01/90739) (pages 24 and 25) discloses use of a detector in conjunction with a fraction collector for the preparative chromatography. Kibbey (U.S. Patent No. 5,670,054) (column 7, lines 51-53) discloses a UV detector is used in conjunction with a fraction collector for directing flow. Kibbey (U.S. Patent No. 5,670,054) (column 7, lines 44-45) discloses that a mass spectrometer identifies mass. It would have been obvious that Collins (WO 01/90739) discloses a UV detector and that his mass spectrometer identifies mass because Collins (WO 01/90739) (pages 24 and 25) itself discloses use of a detector in conjunction with a fraction collector for the preparative chromatography and because Kibbey (U.S. Patent No. 5,670,054) (column 7, lines 51-53) discloses a UV detector is used in conjunction with a fraction collector for directing flow and because Kibbey (U.S. Patent No. 5,670,054) (column 7, lines 44-45) discloses that a mass spectrometer identifies mass.

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Claims 7, 8, 21, 37, and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Collins (WO 01/90739) in view of Afeyan (U.S. Patent No. 6,344,172). At best, the claims differ from Collins (WO 01/90739) in reciting use of an artificial neural network. Afeyan (U.S. Patent No. 6,344,172) (column 14, lines 13-45) discloses use of an artificial intelligence program recognizes patterns and allows for the elimination of manual or piecemeal preparatory steps. It would have been obvious to use artificial intelligence in Collins (WO 01/90739) because Afeyan (U.S. Patent No. 6,344,172) (column 14, lines 13-45) discloses use of an artificial intelligence program recognizes patterns and allows for the elimination of manual or piecemeal preparatory steps.

Claims 17-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Collins (WO 01/90739) in view of Zambias (U.S. Patent No. 5,766,481). At best, the claims differ from Collins (WO 01/90739) in reciting combining streams. Zambias (U.S. Patent No. 5,766,481) (column 1, line 66-column 2, line 40; column 11, line 66-column 12, line 11; and column 12, lines 44-62) discloses that combining streams allows processing a much larger number of compounds with the same equipment. It would have been obvious to combine streams in Collins (WO 01/90739) because Zambias (U.S. Patent No. 5,766,481) (column 1, line 66-column 2, line 40; column 11, line 66-column 12, line 11; and column 12, lines 44-62) discloses that combining streams allows processing a much larger number of compounds with the same equipment.

Claims 23, 24, 28, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Collins (WO 01/90739) in view of Zambias (U.S. Patent No. 5,766,481) as applied to claims 17-

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29 above, and further in view of Kibbey (U.S. Patent No. 5,670,054). At best, the claims differ from Collins (WO 01/90739) in view of Zambias (U.S. Patent No. 5,766,481) in the clarity of disclosing a UV detector and that a mass spectrometer identifies mass. Collins (WO 01/90739) (pages 24 and 25) discloses use of a detector in conjunction with a fraction collector for the preparative chromatography. Kibbey (U.S. Patent No. 5,670,054) (column 7, lines 51-53) discloses a UV detector is used in conjunction with a fraction collector for directing flow. Kibbey (U.S. Patent No. 5,670,054) (column 7, lines 44-45) discloses that a mass spectrometer identifies mass. It would have been obvious that Collins (WO 01/90739) in view of Zambias (U.S. Patent No. 5,766,481) discloses a UV detector and that his mass spectrometer identifies mass because Collins (WO 01/90739) (pages 24 and 25) itself discloses use of a detector in conjunction with a fraction collector for the preparative chromatography and because Kibbey (U.S. Patent No. 5,670,054) (column 7, lines 51-53) discloses a UV detector is used in conjunction with a fraction collector for directing flow and because Kibbey (U.S. Patent No. 5,670,054) (column 7, lines 44-45) discloses that a mass spectrometer identifies mass.

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Collins (WO 01/90739) in view of Zambias (U.S. Patent No. 5,766,481) as applied to claims 17-29 above, and further in view of Afeyan (U.S. Patent No. 6,344,172). At best, the claim differs from Collins (WO 01/90739) in view of Zambias (U.S. Patent No. 5,766,481) in reciting use of an artificial neural network. Afeyan (U.S. Patent No. 6,344,172) (column 14, lines 13-45) discloses use of an artificial intelligence program recognizes patterns and allows for the elimination of manual or

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piecemeal preparatory steps. It would have been obvious to use artificial intelligence in Collins (WO 01/90739) in view of Zambias (U.S. Patent No. 5,766,481) because Afeyan (U.S. Patent No. 6,344,172) (column 14, lines 13-45) discloses use of an artificial intelligence program recognizes patterns and allows for the elimination of manual or piecemeal preparatory steps.

The remarks urge that examining the species of claims 30-34 would not be a serious burden on the examiner. However, the examination of the additional invention would require searching the additional subclasses of Class 210, subclasses 658 and 198.3. The additional search and different issues of patentability would be an enormous burden on the examiner. As such, the election of species has been reconsidered, deemed proper, and made final for the reasons of record.

Any inquiry concerning this communication should be directed to E. Therkorn at telephone number (703) 308-0362.



Ernest G. Therkorn
Primary Examiner
Art Unit 1723

EGT/12
February 27, 2003